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FEATURE ARTICLES

SEXUAL DICHROMATISM, DIMORPHISM, AND CONDITION-DEPENDENT COLORATION IN BLUE-TAILED BEE-EATERS

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Abstract. The Blue-tailed Bee-eater (*Merops philippinus*) is a cooperatively breeding and socially monogamous member of the Coraciiformes that displays conspicuous coloration and elongated central rectrices (“streamers”). Humans cannot distinguish males from females; both sexes are brightly colored with a chestnut throat patch, a yellow chin, and green body coloration fading into a turquoise-blue rump and tail. We quantified coloration with ultraviolet- (UV) visible spectrometry and measured morphology to determine the extent of sexual dichromatism and dimorphism. Males displayed more exaggerated coloration, longer tail streamers, and were larger than females. Multiple plumage ornaments (measures of plumage coloration and streamer length) were positively correlated in both sexes. Males in better body condition expressed darker chestnut throats and more chromatic green body plumage. Females in better body condition, however, exhibited more chromatic blue rumps and yellow chins. This study represents the first objective description of plumage ornamentation in the order Coraciiformes.

Key words: bee-eaters, condition-dependent traits, Coraciiformes, dichromatism, dimorphism, *Merops philippinus*, plumage coloration.